

REMARKS

Independent Claim 1 as amended, with its dependent Claims 2-4, and independent Claim 11, remain in the application. Independent Claim 12 is newly presented, along with its new dependent Claim 13. Claims 5-10 were previously withdrawn. Reexamination and reconsideration of Claims 1-4 and 11-13 is hereby requested.

In the Office Action mailed on June 28, 2005, the Examiner rejected Claims 1 and 4 under 35 U.S.C. §103(a) as being obvious over Japan Publication No. JP-11210794 ("the '794 Publication") in view of Prior Art Figure 1 of the Application. The Examiner also objected to the language "generally rigid polymer" recited in Claim 1 as new matter. The Examiner further stated that the Affidavit filed under 37 C.F.R. § 1.132 is insufficient to overcome the rejection of Claims 1 and 4. Applicants note that, on the Office Action Summary page, both the final and non-final boxes, 2a and 2b, were checked. Pursuant to the Examiner's message to an Attorney for Applicants on July 14, 2005, the Office Action has been confirmed as non-final.

Applicants have considered the Office Action and have amended the claims. Specifically, Claim 1 has been amended, and new Claims 12 and 13 have been added. Based upon these amendments and the following remarks, Applicants respectfully submit that the claims remaining in the application, that is, Claims 1-4 and 11-13, are in condition for allowance.

I. CLAIM 1 DOES NOT RECITE NEW MATTER.

The Examiner objected to the language "general [sic] rigid polymer" recited in Claim 1 as new matter. Applicants, in a prior Response, amended Claim 1 to include the recitation of the spacer disk being formed of a "generally rigid polymer". In the instant Office Action, the Examiner commented that, at lines 25-26 [sic] of page 11 of the Application, the specification

discloses that “spacer disc 30 is formed of ultrahigh molecular weight polyethylene...” and asserted that the specification does not describe ultrahigh molecular weight polyethylene as a “general [sic] rigid polymer”. The Examiner concluded that Applicants’ recitation of “generally rigid polymer” in Claim 1 is new matter that should be canceled. However, Applicants specifically describe, at lines 24-26 of page 11 of the Application, that spacer apparatus 30 preferably is molded from ultrahigh molecular weight polyethylene. Applicants then state, at lines 1-3 of page 16, that various other suitable materials could be utilized for spacer apparatus 30, which include other generally rigid polymers. Applicants respectfully submit that the breadth of the specification, coupled with the fact that the recitation of “generally rigid polymer” in Claim 1 is an inherent characteristic of the disclosure of ultrahigh molecular weight polyethylene, establish that the Claim does not recite any new matter.

It is well settled that a patent applicant need not explain that which is known or available to one of ordinary skill in the art, nor does the applicant need to explain every last detail, “else patent specifications would turn into product specifications, which they were never intended to be.” *See Koito Mfg. Co., Ltd. v. N. American Lighting, Inc.*, 381 F.3d 1142, 1156, 72 U.S.P.Q.2d 1190 (Fed. Cir. 2004) (*quoting In re Gay*, 309 F.2d 769, 774, 50 C.C.P.A. 725 (C.C.P.A. 1962)). Correspondingly, if a claim amendment reflects an inherent characteristic of the subject matter in an applicant’s disclosure, the amendment is not new matter and constitutes a proper amendment. *See In re Nathan*, 328 F.2d 1005, 1008-1009, 51 C.C.P.A. 1059, 1063 (C.C.P.A. 1964); M.P.E.P. § 2163.07(a). An inherent characteristic is one that is necessarily present. *See* M.P.E.P. § 2163.07(a).

As mentioned above, Applicants previously added the limitation in Claim 1 that the spacer disk is formed of a “generally rigid polymer”. In the specification, Applicants describe

that spacer apparatus 30 preferably is molded from ultrahigh molecular weight polyethylene, and that various other suitable materials could be utilized for the spacer apparatus. (Page 11, ll. 24-26 and page 16, ll. 1-3.) By describing ultrahigh molecular weight as a preferable material, and allowing for the use of other suitable materials, the disclosure of the Application clearly encompasses more than ultrahigh molecular weight polyethylene. Moreover, as will be shown immediately below, ultrahigh molecular weight polyethylene inherently is a rigid polymer, which also supports Applicants' position that the amendment to Claim 1 is not new matter and therefore is proper.

A rigid plastic or rigid polymer is defined by the American Society for Testing and Materials (ASTM) as having a tensile or flexural modulus of elasticity that is greater than 100,000 pounds per square inch (psi) when tested in accordance with ASTM Test Method 638, as shown in Exhibit A hereto. Exhibit B hereto shows that ultrahigh molecular weight polyethylene has a tensile modulus of elasticity, when tested according to ASTM Test Method 638, of 120,000 psi. Therefore, ultrahigh molecular weight polyethylene is, by definition, a rigid polymer, and this rigidity unequivocally is an inherent characteristic.

As a result, Applicants respectfully submit that the claim recitation of the spacer disk being formed of a "generally rigid polymer" reflects an inherent characteristic of the disclosure, is not new matter, and therefore is a proper amendment to Claim 1.

II. THE AFFIDAVIT UNDER 37 C.F.R. § 1.132 IS PROPER.

The Examiner stated that the Affidavit filed under 37 C.F.R. § 1.132 is insufficient to overcome the rejection of Claims 1 and 4. Specifically, the Examiner asserted that the evidence is not commensurate in scope with the claims, and fails to set forth facts. Regarding the

assertion that the evidence is not commensurate in scope with the claims, the Examiner stated that the Affidavit is directed to a "Glove Washer", while the claimed subject matter is directed a "spacer disk". As to the assertion that the evidence fails to set forth facts, the Examiner stated that the Affidavit discloses graphs without factual evidence with respect to sales, that the graphs do not appear to reflect the influence of marketing and/or advertising, and that the Affidavit does not disclose additional information regarding the questionnaires in the Regional Managers Reports, such as the number of questionnaires sent, how many were returned, etc.

The Examiner further asserted that the Affidavit does not provide evidence of long felt need, since it allegedly does not show that others of ordinary skill in the art were working on the problem and for how long, or that if those working on the problem knew of the '794 Publication or Prior Art Figure 1 of the Application, they would still be unable to solve the problem. Applicants respectfully submit that the Affidavit establishes a long-felt need and resultant commercial success, and thereby overcomes the rejection of Claims 1 and 4 under 35 U.S.C. § 103(a).

Evidence of commercial success and long-felt need may overcome a rejection under 35 U.S.C. § 103(a), and is to be taken as a whole, rather than being pieced apart to create doubt. *See In re Piasecki*, 745 F.2d 1468, 1474-1475, 223 U.S.P.Q. 785 (Fed. Cir. 1984). Applicants respectfully submit that, when the Affidavit is considered as a whole, it provides ample evidence of commercial success and long-felt need of the invention as recited in Claim 1. On this basis alone, Applicants submit that the Affidavit is proper evidence to overcome the rejection of independent Claim 1 and dependent Claim 4. However, for the purpose of completeness, Applicants will address the assertions of the Examiner that improperly piece apart the Affidavit.

A. The Evidence Is Commensurate In Scope With the Claims.

Regarding the Examiner's assertion that the evidence is not commensurate in scope with the claims, since the Affidavit is directed to a "Glove Washer" while the claimed subject matter is directed to a "spacer disk", Applicants refer to paragraph 13 of the Affidavit. That paragraph specifically states that "glove washer" and "cap style spacer" are terms of art that are used to describe the invention recited in Claim 1, namely "spacer disks". Therefore, the evidence offered in support of the Affidavit is specifically and unequivocally directed to the claimed invention.

B. The Affidavit Sets Forth Sufficient Facts.

Turning to the Examiner's assertion that the Affidavit discloses graphs without factual evidence with respect to sales, Applicants submit that the graphs are evidence of actual sales. As paragraph 14 of the Affidavit states, the graphs attached thereto as Exhibits A and B include the actual quantities of spacers sold in 2003 and 2004, and the graphs summarize this factual sales data in a concise form. Such factual evidence of the quantity of sales of products embodying the claimed invention is a well-accepted method of establishing commercial success to overcome an obviousness rejection. *See Symbol Tech., Inc. v. Opticon, Inc.*, 935 F.2d 1569, 1579, 19 U.S.P.Q.2d 1241 (Fed. Cir. 1991). Moreover, the use of charts and graphs is a widely accepted method of summarizing large amounts of data, such as the sale of many thousands of components. *See, e.g.*, Federal Rule of Evidence 1006. As a result, Applicants submit that the graphs properly set forth factual evidence in the form of sales data summaries.

The Examiner also asserted that the graphs do not appear to reflect the influence of marketing and/or advertising. Applicants respectfully submit that there is no particular marketing and/or advertising for the graphs to reflect. The invention recited in Claim 1 is

directed to a value-added component used in an axle/suspension system of a heavy-duty vehicle. Applicants and the Assignee of the invention advertise and market such axle/suspension systems as a whole, rather than engaging in a separate advertising and/or marketing campaign directed to the component recited in Claim 1. Since there is no particular influence of marketing or advertising, Applicants respectfully submit that the Examiner's assertion is moot.

As to the Examiner's assertion regarding a lack of additional information regarding the questionnaires in the Regional Managers Reports, such as the number of questionnaires sent, returned, etc., Applicants respectfully submit that such additional information is not necessary. Evidence that illustrates adoption of a product by those in an industry illustrates fulfillment of a long-felt need, and commercial success, which weighs against any finding of obviousness. *See ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 546, 48 U.S.P.Q.2d 1321 (Fed. Cir. 1998). The questionnaires attached to the Affidavit as Exhibit C have been offered to show acceptance and adoption of the invention recited in Claim 1 by customers in the heavy duty vehicle industry, as established by their comments. For example, Customer A commented that the product embodying the claimed invention lasted three times longer than products of the prior art, is happy with such results, and is replacing the prior art product with the product embodying the claimed invention. Customer D stated that he/she is very satisfied with the results obtained using that product and has adopted it as a standard item on his/her trucking fleet, thereby replacing the prior art product. Customer E has also adopted the product that embodies the invention recited in Claim 1, as has Customer G, who has also outfitted his/her entire truck fleet with it, replacing the prior art product. This evidence is therefore consistent with Federal Circuit precedent to establish that customers in the heavy-duty vehicle industry have adopted the invention recited in

Claim 1, and indeed have replaced the prior-art spacer disks with those of the invention, which weighs against a finding of obviousness.

C. The Affidavit Provides Evidence of Long-Felt Need.

The Examiner further asserted that the Affidavit does not show long-felt need, since it does not show that others were working on the problem or for how long, or that if those working on the problem knew of the '794 Publication or Prior Art Figure 1 of the Application, which were cited by the Examiner, they would still be unable to solve the problem. Applicants respectfully submit that the Affidavit does establish long-felt need. Specifically, the evidence shows that the prior state-of-the-art products were not solving the problem, establishing long-felt need and leading to the commercial success of Applicants' invention.

1. The Affidavit Shows that Others Were Working on the Problem.

In the heavy-duty vehicle industry, when there is a problem with a component of an axle/suspension system, manufacturers work to solve the problem in order to provide an optimum system. As recited in the Application at page 4, line 10 to page 5, line 11, the purpose of a spacer disk in an axle/suspension system is to prevent contact between other components of the system, while a desirable goal of such disks is to resist excessive wear. Many purchasers in the heavy-duty vehicle industry buy state-of-the-art systems, which are systems that incorporate components that are designed to solve problems such as lack of resistance to excessive wear. The evidence provided by Applicants shows that the state-of-the-art disks have not successfully resisted such excessive wear, while the product embodying the invention recited in Claim 1 does so.

For example, Customer C stated that the available prior art products wore out completely after six months of operation, which was an ongoing issue, but the product embodying the

invention recited in Claim 1 is a major improvement. Customer E stated that the prior state-of-the-art products are “nothing but trouble” due to wear, and the product embodying the invention recited in Claim 1 solved the problem. Customer G stated that the prior state-of-the-art products failed prematurely, while the products embodying the invention recited in Claim 1 solved the problem. Customer H has had a “long history” with the problem of excessive wear using prior state-of-the-art products, and is very happy with the improved performance of the product embodying the invention recited in Claim 1.

Manufacturers in the heavy-duty vehicle industry have worked on solving the problem of excessive wear since the problem existed in order to provide an optimum axle/suspension system. Applicants’ evidence establishes that the problem was present for a significant period of time, but the state of the art that existed immediately prior to Applicants’ invention did not solve the problem. Rather, the product embodying the invention recited in Claim 1 has solved the problem, and in fact has been adopted by customers to replace the prior art. Therefore, Applicants respectfully submit that the Affidavit provides evidence of long-felt need, overcoming the rejection of Claim 1.

2. The Affidavit Also Shows that Others Who Knew of the References
Would Be Unable to Solve the Problem.

In regard to the Examiner’s assertion that there is no evidence that, if others of ordinary skill in the art who were working on the problem knew of the ‘794 Publication and Prior Art Figure 1 of the Application, they would still be unable to solve the problem, Applicants respectfully submit that others would not and did not solve the problem.

As to Prior Art Figure 1 of the Application, Applicants state at page 9, lines 11-12 and page 10, lines 19-27, that the Figure shows a prior art axle/suspension system 10 having prior art

spacer disks 28. Spacer disks 28 are among the prior art that did not reduce the problem of excessive wear, as shown by the customer comments provided as Exhibit C to the Affidavit. As prior art spacer disks in the heavy-duty vehicle industry, these are spacer disks of which others in the industry were aware, yet others were unable to solve the problem of excessive wear. Rather, as recited in Claim 1, Applicants solved the problem.

Regarding the '794 Publication, Applicants respectfully submit that others of ordinary skill in the art would not know of the Publication, nor would such others use it to solve the problem of reducing excessive wear. More particularly, as explained in detail below, the '794 Publication is directed to noise suppression in the automotive industry, rather than reducing excessive wear in the heavy duty vehicle industry, and is therefore nonanalogous art. Since the hypothetical person having ordinary skill in the art is concerned only with the principles of the pertinent art, *see* M.P.E.P. § 2141.03, and the '794 Publication is nonanalogous art, Applicants respectfully submit that one of ordinary skill in the art would not know of the Publication and would thus not apply it to solve the problem. In addition, since the purpose of the '794 Publication is the suppression of noise, Applicants submit that one who might hypothetically know of the Publication would not be able to use it to solve the different problem of excessive wear.

For all of these reasons, Applicants respectfully submit that the Affidavit is sufficient to overcome the rejection of amended Claim 1 under 35 U.S.C. § 103(a).

III. THE CLAIM REJECTIONS UNDER 35 U.S.C. §103 HAVE BEEN OVERCOME.

The Examiner rejected Claims 1 and 4 under 35 U.S.C. §103(a) as being obvious over the '794 Publication in view of Prior Art Figure 1 of the Application. Specifically, the Examiner

stated that the '794 Publication discloses all of the elements of Claim 1, except for the material of the spacer disk, which is taught by Prior Art Figure 1 of the Application. Applicants respectfully submit that the recited elements of Claim 1, as amended, are not taught or even suggested, alone or in combination, by the '794 Publication and Prior Art Figure 1 of the Application.

A. THE '794 PUBLICATION IS NOT A PROPER REFERENCE.

Applicants respectfully submit that the '794 Publication is not a proper reference for an obviousness rejection of the invention recited in amended Claim 1. When the objective of a reference is different than that of the claimed invention, the reference teaches away from the invention and is not a reference that renders the claimed invention obvious. *See In re Haruna*, 249 F.3d 1327, 58 U.S.P.Q.2d 1517 (Fed. Cir. 2001). The '794 Publication expressly states that its objective is to suppress noise, as recited on page 1 and in paragraphs 7 and 8 of the Publication. In contrast, the objective of Applicants' invention is to reduce wear, as amended Claim 1 expressly recites "whereby excessive wear to the spacer disk generally is prevented." The objective of preventing excessive wear is strikingly different from suppressing noise, showing that the '794 Publication teaches away from the invention recited in amended Claim 1, and thus is not a proper reference for an obviousness rejection.

The different objectives of the invention recited in amended Claim 1 and the '794 Publication are borne out by the significant structural differences between them. Applicants now address two of these differences.

First, to comply with the objective of suppressing noise, ring 6 of the '794 Publication is formed of rubber, which is a soft, elastomeric material that provides noise dampening characteristics, as recited in paragraph 8 of the Publication. In the Office Action, the Examiner

compares rubber ring 6 to the spacer disk recited in Claim 1. However, the spacer disk recited in amended Claim 1 is formed of a generally rigid polymer, which cooperates with the other features recited in amended Claim 1 to resist excessive wear, not to suppress noise. Such differences between rubber ring 6 of the '794 Publication and the spacer disk recited in amended Claim 1 illustrate the different objectives of the '794 Publication and amended Claim 1, showing that the '794 Publication teaches away from the claimed invention and is therefore not a proper reference.

Second, the side loads experienced by an axle/suspension system of a heavy-duty vehicle are a significant cause of the problem of excessive wear, as recited in the Application at page 3, line 9 through page 4, line 14, which is the problem that Claim 1 reduces or generally prevents. However, the '794 Publication, as described in paragraph 1 of the Publication, is directed to automobiles, which experience side loads that are of significantly less magnitude than the side loads experienced by the an axle/suspension system of a heavy-duty vehicle. In addition to experiencing side loads of a lesser magnitude, automotive suspensions such as those disclosed in the '794 Publication employ a control link to handle side loads, while most heavy-duty vehicles do not. As a result, the elastomeric rubber ring 6 of the '794 Publication would be too soft and flexible to support the side loads encountered by the axle/suspension system of a heavy-duty vehicle. If subjected to the side loads encountered by a heavy-duty vehicle axle/suspension system, rubber ring 6 of the Japan Publication would extrude out from between the bushing assembly and the frame hanger. In contrast, the spacer disk recited in amended Claim 1, being formed of a generally rigid polymer, distributes the load forces over a larger area, thereby reducing excessive wear. Thus, the significant differences in side load forces encountered by the

structures in the '794 Publication and amended Claim 1, and the way in which they are handled, again show that the '794 Publication teaches away from the claimed invention.

Such differences between the '794 Publication and amended Claim 1 demonstrate the fact that the '794 Publication teaches away from amended Claim 1 and therefore cannot render the claimed invention obvious.

B. THE '794 PUBLICATION AND FIGURE 1 CANNOT BE COMBINED.

Since the '794 Publication does not disclose the spacer disk being formed of a generally rigid polymer, as recited in amended Claim 1, the Examiner combines the '794 Publication with Prior Art Figure 1 of the Application. The Examiner concludes that, since Prior Art Figure 1 of the Application includes a spacer disk of ultrahigh molecular weight polyethylene, Claim 1 is rendered obvious over the '794 Publication in view of Prior Art Figure 1. However, Applicants respectfully submit that the '794 Publication cannot be combined with Prior Art Figure 1 of the Application for a finding of obviousness, for at least two reasons.

1. The '794 Publication is Nonanalogous Art.

For a reference to be properly used as a basis of rejection, the reference must either be in the field of the applicant's endeavor, or if not, then be pertinent to the particular problem with which the inventor was concerned. *See In re Oetiker*, 977 F.2d 1443, 1447, 24 U.S.P.Q.2d 1443, 1445 (Fed. Cir. 1992). If the reference is not in the field or is not pertinent to the problem, it cannot be combined with another reference and used as a basis for an obviousness rejection. *See id.*

As described in detail above, the '794 Publication is in a different field than that of Applicants' invention. That is, the '794 Publication is directed to the automotive industry, while the invention recited in Claim 1 is directed to the heavy-duty vehicle industry, which involves

much higher and different loads than the automotive industry, as well as dramatically different structures to handle those loads. In addition, the '794 Publication is directed to the problem of excessive noise, which is not pertinent to the problem of excessive wear that is solved by the invention recited in Claim 1. Since the '794 Publication is in a different field from the invention recited in Claim 1, and is not pertinent to the problem solved by the invention recited in Claim 1, Applicants respectfully submit that it may not be combined with another reference for a finding of obviousness, which thereby overcomes the rejection.

2. There Is No Suggestion to Combine the References.

In order for references to be combined to render a claimed invention obvious, there must be a suggestion in the references to combine them. *See In re Dembiczak*, 175 F.3d 994, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999); *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). As described above, the '794 Publication is directed to automobiles, with the objective of reducing noise. In contrast, Prior Art Figure 1 of the Application is directed to heavy-duty vehicles, with the objective of reducing excessive wear, as recited at page 9, line 11 through page 11, line 15 of the Application. Thus, these two references are directed to entirely different industries, that is, the automobile industry versus the heavy-duty vehicle industry. In addition, their objectives are entirely different: the '794 Publication is directed to suppressing noise, while Prior Art Figure 1 is directed to reducing excessive wear (although unsuccessfully when compared to the invention recited in amended Claim 1).

These significant differences between the '794 Publication and Prior Art Figure 1 of the Application show that there is no suggestion in the references to combine them. Without such a suggestion, Applicants respectfully submit that it is improper to combine them for a finding of obviousness, thereby overcoming the rejection.

C. CLAIM 4 IS ALSO ALLOWABLE.

The Examiner also rejected Claim 4 under 35 U.S.C. §103(a) as being obvious over the '794 Publication in view of Prior Art Figure 1 of the Application. Applicants respectfully submit that expressly recited elements of Claim 4 are not taught, alone or in combination, by the '794 Publication and Prior Art Figure 1. Specifically, Claim 4 depends directly from independent Claim 1. Since independent Claim 1 is allowable for the reasons discussed above, Applicants respectfully submit that dependent Claim 4 also is allowable.

IV. CLAIMS 11-14 ALSO ARE IN CONDITION FOR ALLOWANCE.

A. INDEPENDENT CLAIM 11.

Applicants thank the Examiner for the allowance of independent Claim 11.

B. NEW CLAIMS 12 AND 13.

In a prior Office Action dated July 27, 2004, the Examiner allowed dependent Claim 2. In the instant Office Action, the Examiner again allowed dependent Claim 2. Applicants thank the Examiner for the allowance of Claim 2, and new independent Claim 12 is written to combine Claim 2 with independent Claim 1, with the recitations of Claims 1 and 2 as originally allowed.

New Claim 13, which is dependent from Claim 12, reflects limitations recited in originally-submitted Claim 4. Since new Claim 13 depends from allowable independent Claim 12, Applicants respectfully submit that Claims 13 also is allowable.

V. CONCLUSION.

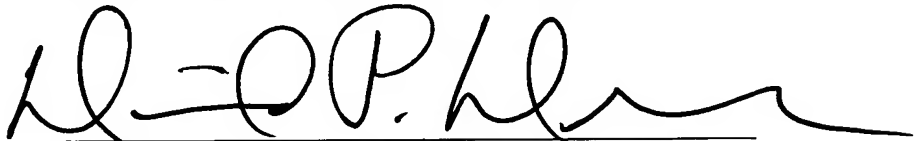
The results produced by Applicants' invention have long been sought after by those skilled in the art, but up until Applicants' invention, the results have been unobtainable. By

distinctly reciting new and non-obvious aspects of the invention in independent Claims 1, 11 and 12, it is believed that the rejections based on obviousness have been overcome. Since Claims 2-4 depend from allowable independent Claim 1, and Claim 13 depends from allowable independent Claim 12, Applicants respectfully submit that these Claims also are in condition for allowance.

In view of the above, it is submitted that the claims remaining in the application now are in condition for allowance. Reconsideration of the rejections is respectfully requested and allowance of Claims 1-4 and 11-13 at an early date is hereby respectfully solicited.

Respectfully submitted,

BUCKINGHAM, DOOLITTLE & BURROUGHS, LLP

A handwritten signature in black ink, appearing to read 'D-P. H', with a long horizontal flourish extending to the right.

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